

WALL HT H	TYPE 19A								WALL HT H	TYPE 19B							
	CMU WIDTH	X	BAR "D"	BAR "C"	DIAM.	BAR "P"	DEPTH D1	DEPTH D2		CMU WIDTH	X	BAR "D"	BAR "C"	DIAM.	BAR "P"	DEPTH D1	DEPTH D2
6' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	5' - 3"	4' - 9"	6' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	6' - 0"	5' - 3"
8' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	6' - 0"	5' - 3"	8' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	7' - 0"	6' - 0"
10' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	6' - 9"	5' - 9"	10' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #6	7' - 9"	6' - 9"
12' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	7' - 3"	6' - 3"	12' - 0"	10"	4' - 0"	#6 @ 40"	—	12"	6 ~ #7	8' - 6"	7' - 3"
14' - 0"	8"	—	#6 @ 32"	—	12"	6 ~ #6	7' - 9"	6' - 9"	14' - 0"	10"	4' - 8"	#6 @ 32"	#6 @ 32"	14"	8 ~ #7	8' - 6"	7' - 3"
16' - 0"	10"	5' - 4"	#6 @ 32"	—	12"	6 ~ #7	8' - 3"	7' - 0"	16' - 0"	10"	5' - 4"	#6 @ 24"	#6 @ 24"	14"	8 ~ #7	9' - 3"	8' - 0"
18' - 0"	10"	6' - 0"	#6 @ 48"	#6 @ 48"	12"	6 ~ #8	8' - 9"	7' - 6"	18' - 0"	10"	6' - 0"	#6 @ 16"	#6 @ 16"	16"	6 ~ #8	9' - 3"	8' - 0"
20' - 0"	10"	6' - 8"	#6 @ 32"	#6 @ 32"	12"	6 ~ #9	9' - 3"	7' - 9"	20' - 0"	10"	8' - 0"	#7 @ 16"	#7 @ 32"	16"	8 ~ #7	10' - 0"	8' - 6"
22' - 0"	10"	7' - 4"	#6 @ 24"	#6 @ 24"	14"	8 ~ #7	9' - 3"	7' - 9"	22' - 0"	10"	10' - 0"	#7 @ 16"	#7 @ 24"	16"	8 ~ #8	10' - 6"	9' - 0"
24' - 0"	10"	8' - 0"	#6 @ 24"	#6 @ 24"	14"	8 ~ #8	9' - 9"	8' - 3"	24' - 0"	10"	12' - 0"	#8 @ 16"	#7 @ 16"	16"	8 ~ #8	11' - 3"	9' - 6"

WALL HT H	TYPE 19C								WALL HT H	TYPE 19D							
	CMU WIDTH	X	BAR "D"	BAR "C"	DIAM.	BAR "P"	DEPTH D1	DEPTH D2		CMU WIDTH	X	BAR "D"	BAR "C"	DIAM.	BAR "P"	DEPTH D1	DEPTH D2
6' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	5' - 9"	5' - 0"	6' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	6' - 6"	5' - 9"
8' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	6' - 6"	5' - 6"	8' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #6	7' - 6"	6' - 6"
10' - 0"	8"	—	#6 @ 48"	—	12"	6 ~ #5	7' - 3"	6' - 3"	10' - 0"	10"	4' - 0"	#6 @ 24"	—	12"	6 ~ #7	8' - 3"	7' - 0"
12' - 0"	8"	—	#6 @ 40"	—	12"	6 ~ #6	7' - 9"	6' - 9"	12' - 0"	10"	4' - 8"	#6 @ 32"	#6 @ 32"	14"	8 ~ #7	8' - 6"	7' - 3"
14' - 0"	8"	5' - 4"	#6 @ 40"	—	12"	6 ~ #7	8' - 6"	7' - 3"	14' - 0"	10"	4' - 8"	#6 @ 24"	#6 @ 24"	14"	8 ~ #7	9' - 3"	8' - 0"
16' - 0"	10"	5' - 4"	#6 @ 32"	#6 @ 32"	14"	8 ~ #6	8' - 6"	7' - 3"	16' - 0"	10"	5' - 4"	#6 @ 16"	#6 @ 16"	16"	6 ~ #8	9' - 6"	8' - 0"
18' - 0"	10"	6' - 0"	#6 @ 24"	#6 @ 24"	14"	8 ~ #7	9' - 0"	7' - 9"	18' - 0"	10"	7' - 4"	#7 @ 16"	#7 @ 24"	16"	8 ~ #8	10' - 0"	8' - 6"
20' - 0"	10"	6' - 8"	#6 @ 24"	#6 @ 16"	14"	8 ~ #8	9' - 9"	8' - 3"	20' - 0"	10"	9' - 8"	#8 @ 16"	#7 @ 16"	16"	8 ~ #9	10' - 9"	9' - 3"
22' - 0"	10"	7' - 4"	#6 @ 16"	#6 @ 16"	14"	8 ~ #9	10' - 3"	8' - 9"	22' - 0"	10"	12' - 0"	#8 @ 16"	#7 @ 16"	16"	8 ~ #10	11' - 6"	9' - 9"
24' - 0"	10"	8' - 0"	#6 @ 16"	#6 @ 16"	16"	8 ~ #8	10' - 3"	8' - 9"	24' - 0"	10"	15' - 0"	#8 @ 16"	#7 @ 16"	18"	8 ~ #10	11' - 6"	9' - 9"

NOTES

1. Wall to be designated Noise Barrier Wall Type 19A, 19B, 19C, or 19D. The Contract specifies actual wall designations.
2. For intermediate wall heights, use the next higher H.
3. All masonry shall be hollow unit and installed as running bond.
4. All masonry is to be specially inspected.
5. All Concrete Masonry Unit (CMU) cells the have vertical steel reinforcing bars or bond beam units shall be filled with grout.
6. Panels shall have at least 3 feet of level ground on each side.
7. Construction joints in the shaft cap shall be spaced 120 feet maximum.
8. See "Masonry Wall Finishes and Details" sheet for masonry block finishes, special shapes, sizes and layouts.
9. The Contract specifies actual foundation requirements D1 or D2.

SOIL TYPE	
SOIL TYPE	ANGLE OF INTERNAL FRICTION $\phi$ (DEGREES)
D1	32
D2	38

WIND EXPOSURE & VELOCITY		
NOISE BARRIER TYPE	WIND EXPOSURE	WIND VELOCITY (MPH)
19A	B1	80
19B	B1	90
19C	B2	80
19D	B2	90

MASONRY WALL ON SHAFT W/ GRADE BEAM FOUNDATION



EXPIRES AUGUST 23, 2006

NOISE BARRIER WALL  
TYPE 19  
STANDARD PLAN D-2.66-00

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Harold J. Peterfeso

11-10-05

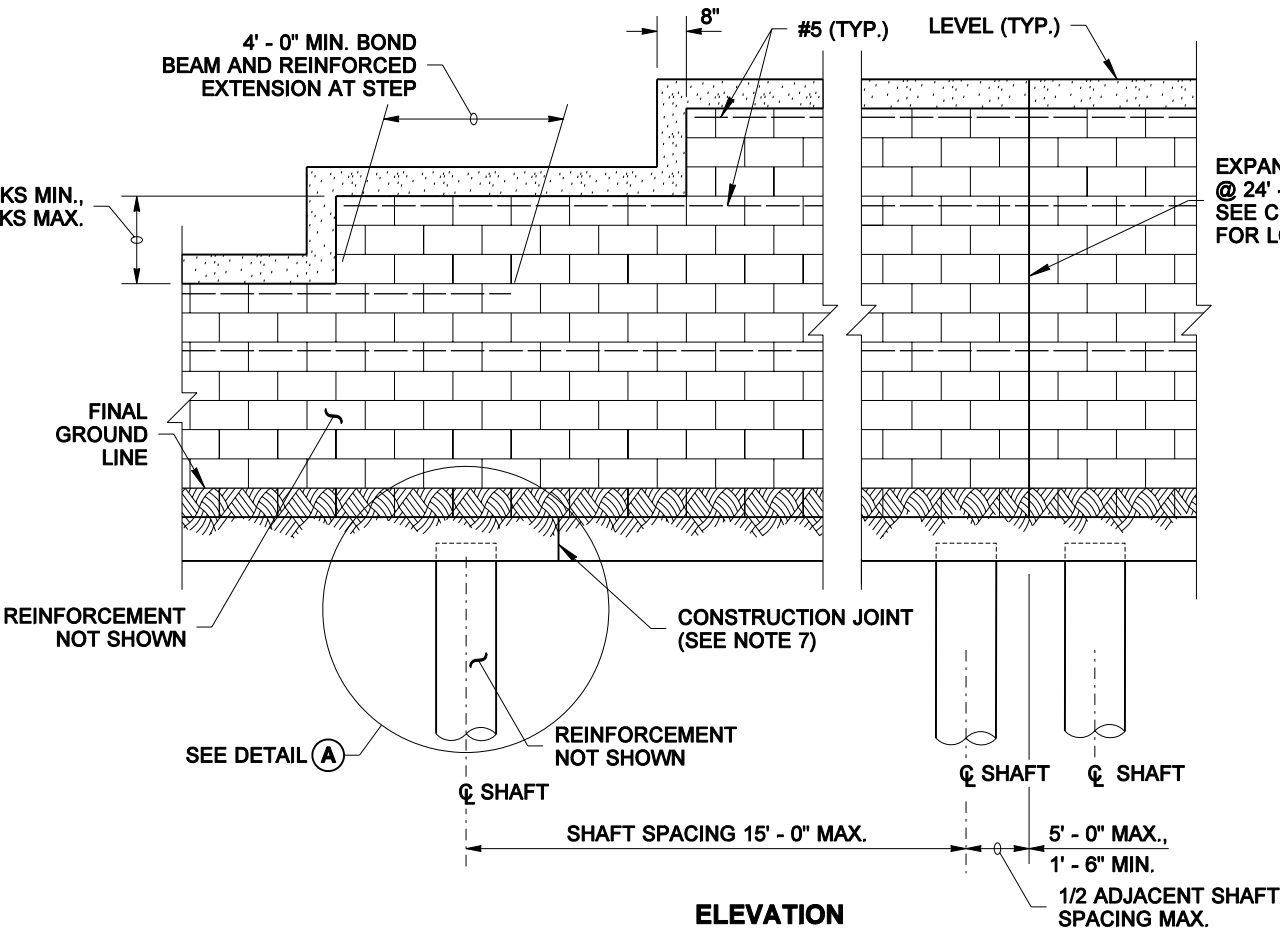
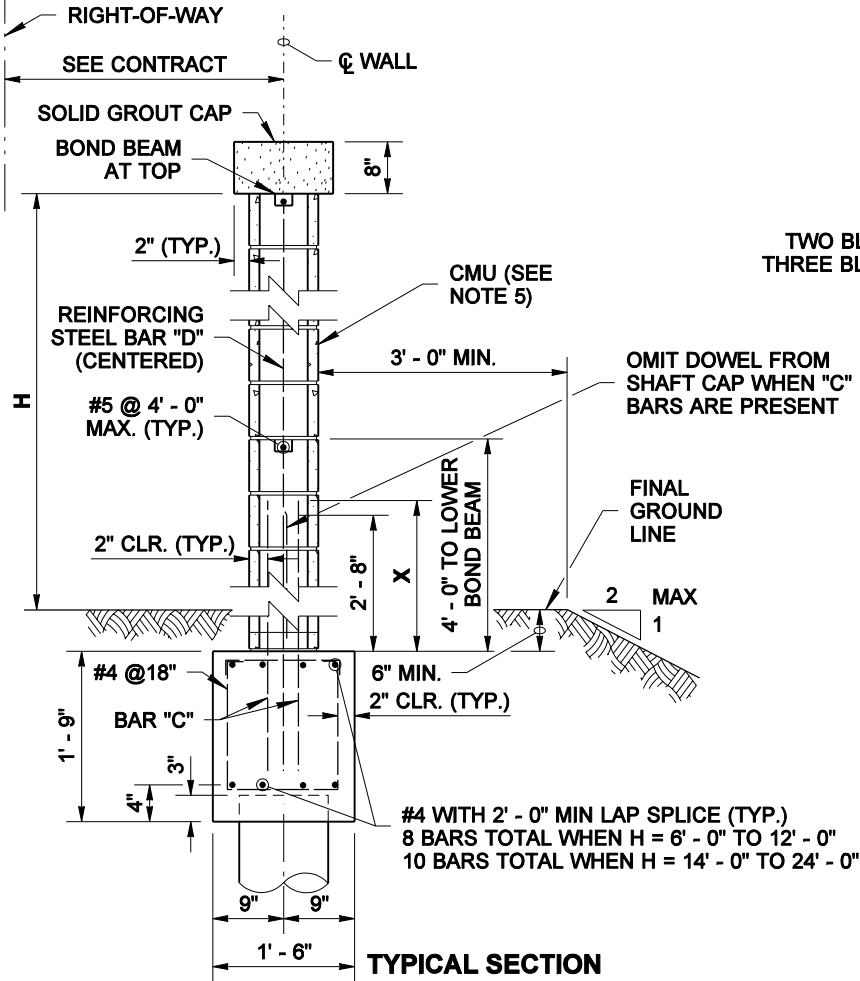
STATE DESIGN ENGINEER

DATE



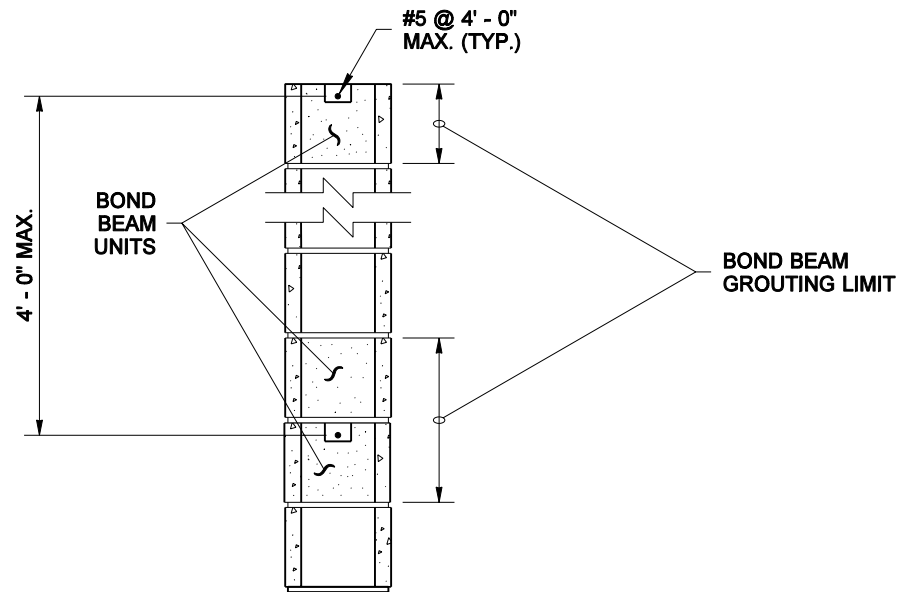
Washington State Department of Transportation

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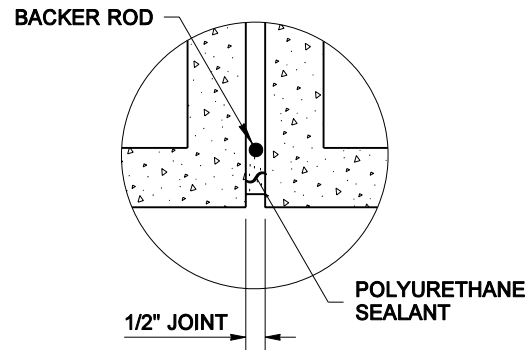


EXPANSION JOINTS  
@ 24' - 0" MAX. CENTERS.  
SEE CONTRACT  
FOR LOCATIONS

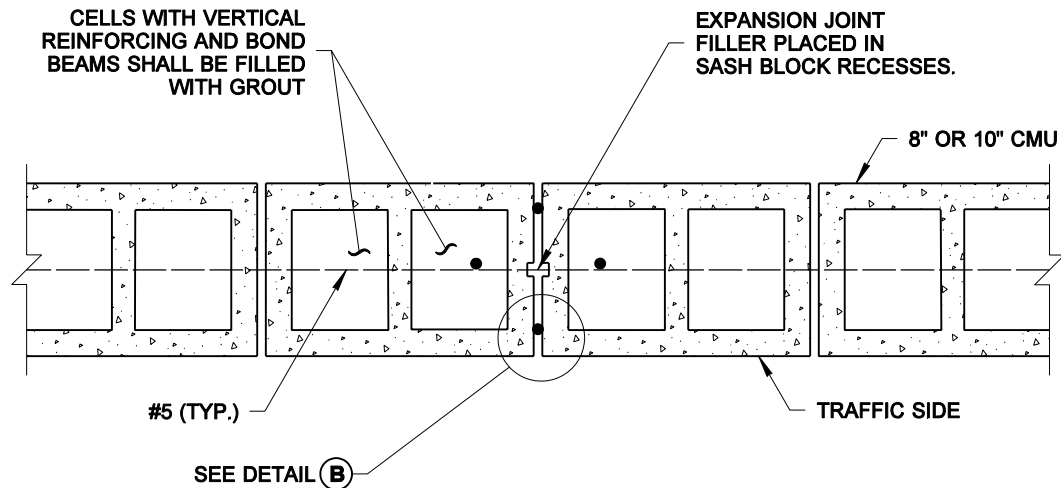
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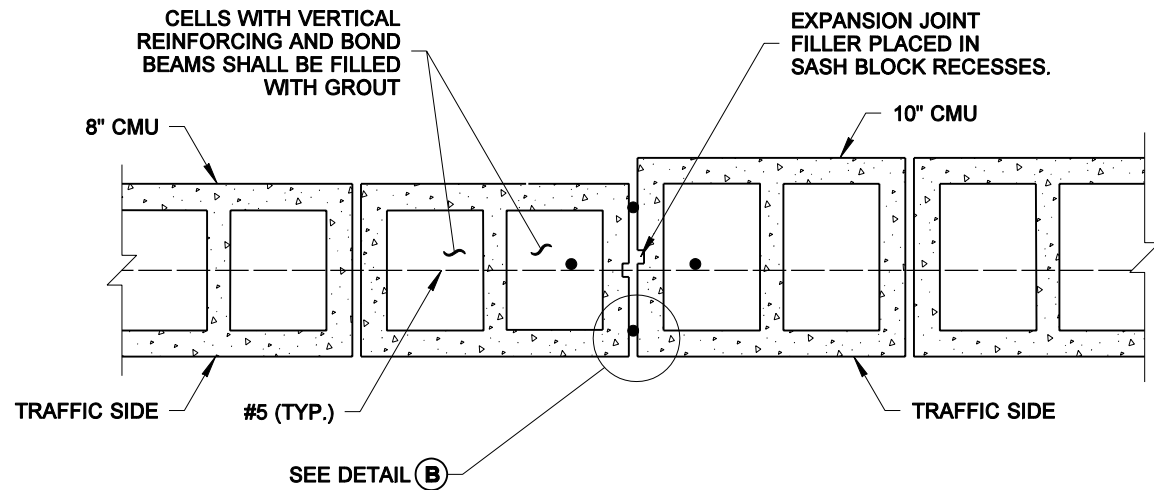
BOND BEAM DETAIL



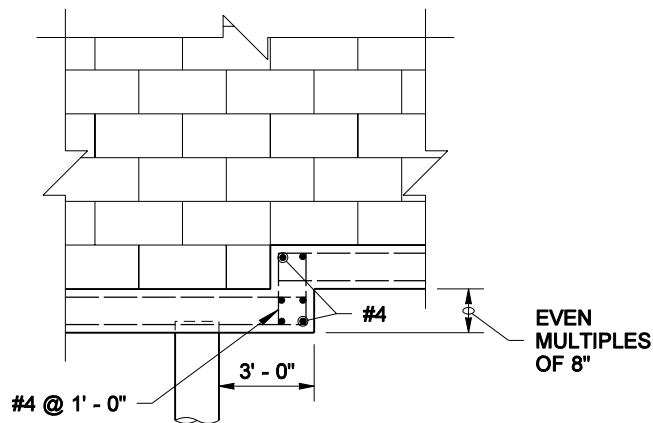
DETAIL B  
TYPICAL BOTH SIDES OF WALL



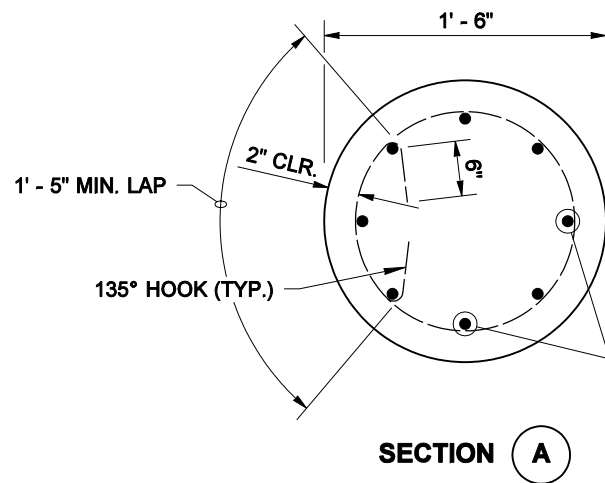
PLAN VIEW  
TYPICAL EXPANSION JOINT



PLAN VIEW  
EXPANSION JOINT AT WIDTH STEP



STEP DETAIL

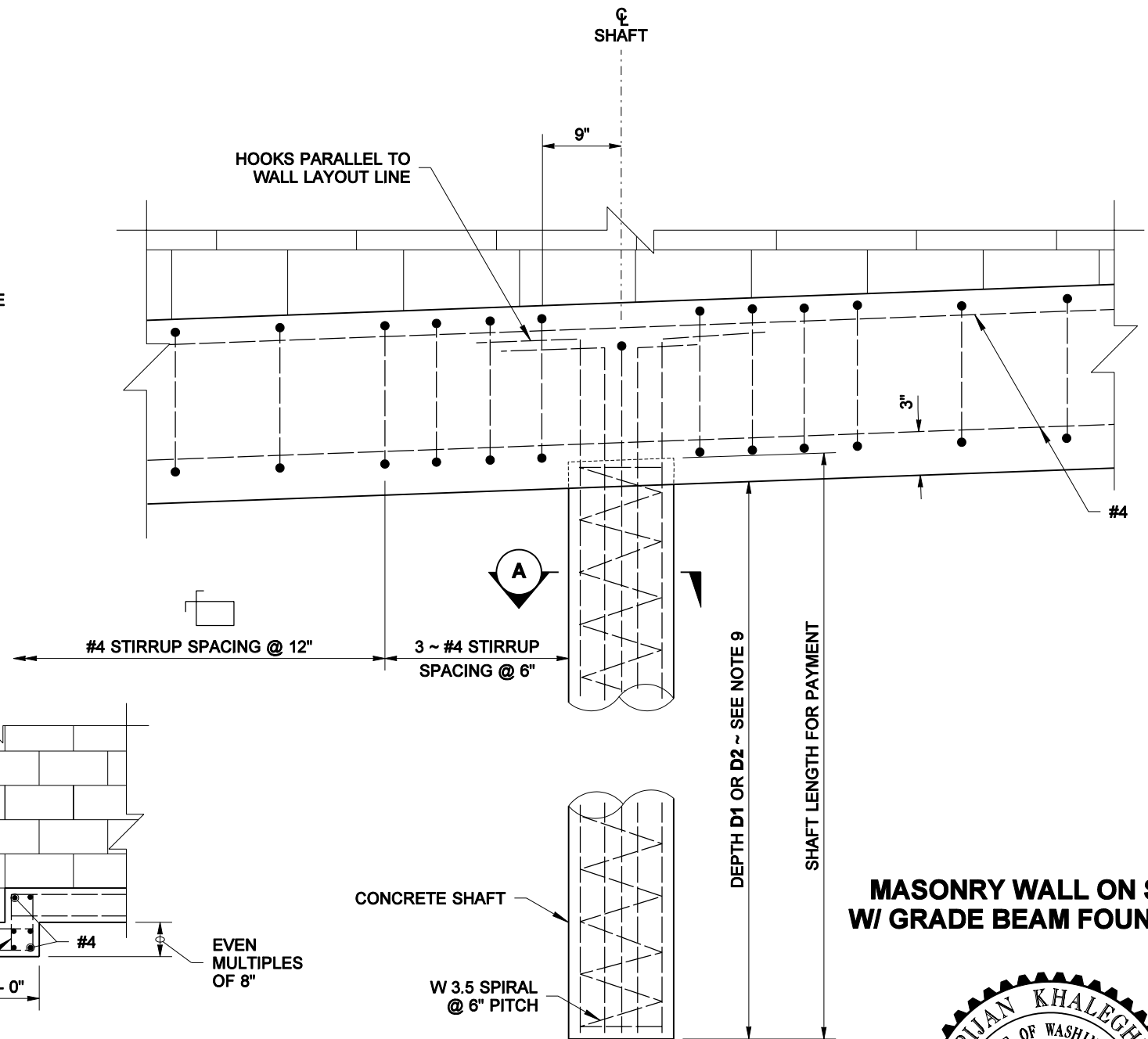


SECTION A

NOTE  
SPIRAL REINFORCEMENT SHALL BE LAPPED  
AS SHOWN TO TERMINATE THE ENDS OF THE  
SPIRAL REINFORCEMENT (TOP AND BOTTOM).

BAR "P" AT EQUAL SPACING  
(FOR TOTAL NUMBER SEE  
REINFORCEMENT SCHEDULE)

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DETAIL A

MASONRY WALL ON SHAFT  
W/ GRADE BEAM FOUNDATION



EXPIRES AUGUST 23, 2006

NOISE BARRIER WALL  
TYPE 19  
STANDARD PLAN D-2.66-00

SHEET 2 OF 2 SHEETS

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STATE DESIGN ENGINEER

DATE



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